

## **Scope of Work: Understanding the Food Ingredients Sector in South Africa**

### **Definition:**

A food ingredient refers to any substance that is added to food or used by the food manufacturing sector to achieve a specific desired effect such as providing nutrition, flavor, color, physical stability and many more. Proposals should exclude ingredients such as wheat and cane sugar, which are classified as bulk commodities.

### **Types, Functions and Key Sectors Utilizing of Food Ingredients:**

Food ingredients are classified by the functions they serve in our food as shown in **Table 1**. Based on the uses listed in **Table 1**, the key sectors utilizing food ingredients are as follow:

- Beverage (alcoholic and non-Alcoholic) Sector.
- Manufactures of Candy, Jellies, Jams and Sweets.
- Cereal.
- Canned/ Tinned Food.
- Dairy.
- Baking and Confectionery.
- Cured/ Processed Meat.
- Sauces, Dressings and Condiments.
- Dietary Foods.
- Animal and Pet Foods

South Africa has a well-developed and advanced food sector, which is a key driver in the use and demand for food ingredients. South Africa has large companies, like Tiger Brands and Coca-Cola, as well as many small and medium sized companies that utilize food ingredients. Food ingredient suppliers include both importers and South African companies, such as Crown National. As a result, South Africa imports a significant amount of food ingredients. In 2019, South African Food ingredient imports amounted to US\$1.7 billion, which is about 22 percent of the total South African agriculture and related products imports.

The United States share of the South African food ingredient imports is 6 percent (US\$110 million), which is competitive and diversified, despite other countries benefiting from duty free access under several Free trade Agreements (FTA). Notably, the United States is the largest supplier of Food Preparations and Enzymes. The United States is the fourth largest supplier of Mixtures Of Odoriferous Substances And Mixtures and Animal Feed Preparations. The beverage sector seems to be the leading driver of food ingredient imports into South Africa. The main food ingredients imported by the beverage sector include Mixtures Of Odoriferous Substances And Mixtures; and Food Preparations.

### **Market Study Should Include:**

- Detailed description of the food ingredients value chain, with a specific focus on imported ingredients and the utilization of distributors and/or importers for food ingredients.
- An explanation of the decision making process food companies utilize to choose suppliers for food ingredients. For example, what makes suppliers competitive in the market.
- Relevant market shares of the food ingredient importers and companies including a comprehensive list of food companies, distributors and importers to be targeted for future marketing activities
- Analysis of best market prospects for U.S. food ingredient suppliers, including potential growth markets. Where possible, also identify potential challenges/hurdles U.S. food ingredient suppliers may face or have to overcome to achieve some of these prospects.

- Analysis of trade in Food Preparations and Animal Feed Preparations that are listed under the Other category that includes a description of the product and what countries are supplying them. The bulk of the imports under the Food Preparations, and Animal Feed Preparations are under the Other category, namely, HS Code 21069090 and HS Code 23099092.

**Table 1: Types of Food Ingredients**

Type	Function
<b>Acid Regulator</b>	<p><b>Purpose</b> - Acidity regulators, such as phosphates, help control the pH levels of foods. Phosphates are useful derivatives of the element phosphorus. It is an essential mineral and the second most abundant nutrient in the human body. In the human body, phosphorus is required for growth, maintenance, and repair of all tissues, and is necessary for the proper formation and growth of bones.</p> <p><b>Source</b> - Phosphate rock is mined to obtain phosphorus. Natural phosphate rocks include clay and other minerals, and must be purified to isolate phosphorus in the form of phosphoric acid. The acid is reacted with alkaline salts to produce purified phosphates.</p> <p><b>Use</b> - Meats, tomato ketchup, some dairy products and soft drinks are common sources of phosphates.</p>
<b>Anti-Caking Agents</b>	<p><b>Purpose</b> - Anti-caking agents keep solid food free-flowing. Powdered foods often clump together and change textures when they absorb water, but anti-caking agents help to prevent this from taking place.</p> <p><b>Source</b> - Many anti-caking agents are derived from natural sources, such as silicates — minerals that are among the most common on earth. Calcium silicate is a common anti-caking agent found in table salt. It helps to absorb both oil and water to reduce salt particles from clumping together.</p> <p><b>Use</b> - Table salt, flours, sugar products, powdered milks, grated cheese, cake mixes and egg mixes.</p>
<b>Colors</b>	<p><b>Purpose</b> - Colors are used to balance and enhance colors that occur naturally in foods. They are also often used to give colorless food life making them more enjoyable and fun.</p> <p><b>Source</b> - There are two types of food colors approved by the FDA—certified colors and exempt from certification. Colors exempt from certification are derived from natural materials like vegetables and minerals, while certified colors are synthetically produced.</p> <p><b>Use</b> - Candy, margarine, beverages, cheese, jellies, yogurt and baked goods.</p>
<b>Food Cultures</b>	<p><b>Purpose</b> - Microbial food cultures exist in foods naturally or are added to provide acidification, texture, and flavor. They also provide nutritional benefits to the consumers, while helping to extend the shelf life of foods.</p> <p><b>Source</b> - Microbial food cultures include bacterial food cultures, fungi and yeast, and can be divided into “probiotics” and “starter cultures”</p> <p><b>Use</b> - Dairy, meats, fish, breads, juices and fermented foods.</p>
<b>Emulsifiers/ Stabilizers/ Thickeners</b>	<p><b>Purpose</b> - Emulsifiers help to prevent oil and water mixtures from separating. Stabilizers help ingredients stay dispersed and suspended in the solution. Thickeners enhance the texture of foods and can give low fat or reduced calorie foods the texture of full fat/calorie options. All are helpful in maintaining the appearance of foods and preserving freshness and quality.</p> <p><b>Source</b> - Mono- and diglycerides of fatty acids are a common example of an emulsifier as they disperse fat in foods to allow it to become more water-soluble. Emulsifiers can be used to reduce calories and/or to replace fat. They can also help reduce food waste by keeping foods mixed.</p> <p><b>Use</b> - Emulsifiers are found in a variety of foods, including margarine, ice cream, bread, chocolate, and some processed meats.</p>
<b>Firming Agents</b>	<p><b>Purpose</b> - Firming agents are used to help foods maintain their crisp quality and strength. They are also commonly used to help ensure the shelf-life of foods.</p> <p><b>Source</b> - Sodium Citrate, also known as citric acid, is a common firming agent derived from citrus.</p>

	<b>Use</b> - Fruits, vegetables, canned meats and fish, pickles and relishes.
<b>Flavors/ Flavor Enhancers</b>	<p><b>Purpose</b> - Flavors are added to foods to enhance taste and flavor. Sometimes they enhance a flavor already present in a food. Other times, they impart flavor to foods that would otherwise be bland and tasteless.</p> <p><b>Source</b> - There are two types of flavors: natural and artificial. Natural flavors are derived from plants and herbs or the raw material of animals. Artificial flavors are developed from synthetic sources to mimic common flavors. Flavors are made from a wide variety of sources, but typically are isolated from certain flavorful foods.</p> <p><b>Use</b> - Candies, soft drinks, sauces, salad dressings, desserts, ice cream, nutritional and dietary foods, and cereals.</p>
<b>Foaming/Anti-foaming Agent</b>	<p><b>Purpose</b> - A foaming agent helps to produce foams in foods by reducing surface tension, while an anti-foaming agent reduces the formation of foam in liquids.</p> <p><b>Source</b> - Foaming agents are commonly made from naturally occurring materials like licorice root and the bark of the trees (quillaja extract). Defoamers are commonly made from silicates, minerals that are among the most common on earth.</p> <p><b>Use</b> - Foaming agents are typically used in beverage and flavored waters. Anti-foaming agents are used in oils, jams and jellies, juices, sauces and liquid eggs.</p>
<b>Humectant</b>	<p><b>Purpose</b> - Help to retain or prevent the loss of moisture in foods by joining and controlling water activity. Humectants also aid in increasing the shelf life of foods by lowering microbial activity.</p> <p><b>Source</b> - Sorbitol is a common humectant in foods that is derived from the natural sugars in fruits, some vegetables and seaweed. It has moisture-stabilizing properties that help to prevent dryness and maintain freshness of foods. Glycerin is a humectant commonly used to control the moisture levels in foods that contain a mix of oil and water.</p> <p><b>Use</b> - Dairy, some fruits and vegetables, confections, and baked goods.</p>
<b>Preservatives</b>	<p><b>Purpose</b> - Preservatives are added to foods to keep them safe for consumption by helping to prevent spoilage. Preservatives also help foods maintain their appearance, taste and texture.</p> <p><b>Source</b> - Preservatives can come in many forms, from natural and artificial to chemical. Sugars, salts and vinegars are examples of natural food preservative, which are often used to delay the growth of bacteria in foods. Antioxidants are examples of chemical preservatives. Antioxidants help to reduce oxidation in foods, increasing the shelf life of foods and preventing spoilage.</p> <p><b>Use</b> - Jellies, cured meats, oils, cereals, dressings, fruits, vegetables, and baked goods.</p>
<b>Sweeteners</b>	<p><b>Purpose</b> - Sweeteners add sweetness to foods, and are often a low to no calorie sugar substitute for sugars. They are used in small amounts to intensify or to obtain the same level of sweetness as regular sugars, without raising blood sugar levels.</p> <p><b>Source</b> - Sweeteners come from a variety of sources from plants like stevia to artificial chemicals.</p> <p><b>Use</b> - Soft drinks, canned foods, jellies and jams, baked goods, candy and dairy products.</p>

Source: <http://ifacprod.wpengine.com/facts-on-food-ingredients/type-of-ingredients/>

**Table 2: South African Food Ingredient Imports from the United States**

South Africa Imports from United States				
Commodity: Food Ingredients				
Annual & YTD Series				
HS Code	Description	2017	2018	2019
	<b>TOTAL</b>	<b>111,531,167</b>	<b>104,285,464</b>	<b>109,705,020</b>
210690	Food Preparations Nesoi	29,330,941	24,657,192	26,469,531

350790	Enzymes And Prepared Enzymes, Nesoi	21,404,781	18,492,471	19,664,277
330210	Mixtures Of Odoriferous Substances And Mixtures (Including Alcoholic Solutions) With A Basis Of These Substances Used In The Food Or Drink Industries	11,979,414	11,884,288	14,482,303
230990	Animal Feed Preparations (Mixed Feeds, Etc.), Other Than Dog Or Cat Food Put Up For Retail Sale	7,403,709	9,111,389	10,369,943
350510	Dextrins And Other Modified Starches	5,657,211	5,043,329	6,136,985
350220	Milk Albumin, Including Concentrates Of Two Or More Whey Proteins	5,492,437	5,177,320	5,488,652
210390	Sauces And Preparations Therefor, Nesoi; Mixed Condiments And Mixed Seasonings	4,622,411	5,586,582	5,320,964
170211	Lactose And Lactose Syrup Containing By Weight 99% Or More Lactose, Expressed As Anhydrous Lactose, Calculated On The Dry Matter	5,138,781	4,174,077	4,908,240
210610	Protein Concentrates And Textured Protein Substances	5,951,637	4,076,151	3,411,200
130213	Vegetable Saps And Extracts Of Hops	1,649,328	1,296,414	2,085,076
121020	Hop Cones, Ground, Powdered Or In The Form Of Pellets; Lupulin	1,702,466	1,948,524	1,372,783
180690	Cocoa Preparations, Not In Bulk Form, Nesoi	1,171,856	1,750,839	1,192,063
120810	Flours And Meals Of Soybeans	540,831	441,918	1,080,479
230800	Vegetable Materials And Vegetable Waste, Vegetable Residues And By-Products Used In Animal Feed, Including Products In The Form Of Pellets, Nesoi	65,428	796,088	668,943
170219	Lactose In Solid Form And Lactose Syrup, Nesoi	171,485	420,724	653,533
170490	Sugar Confectionary (Including White Chocolate), Not Containing Cocoa, Nesoi	847,173	1,026,577	582,502
130219	Vegetable Saps And Extracts, Nesoi	472,553	423,261	546,560
170240	Glucose And Glucose Syrup, Containing In The Dry State At Least 20% But Less Than 50% By Weight Of Fructose, Excluding Invert Sugar	709,551	813,094	482,805
210410	Soups And Broths And Preparations Therefor	142,287	538,786	477,750
292320	Lecithins And Other Phosphoaminolipids	533,342	704,934	439,924
210112	Coffee Extracts, Essences And Concentrates And Preparations Of These Extracts, Essences Or Concentrates Or With A Basis Of Coffee	2,984	241,108	389,679
210220	Yeasts, Inactive; Other Single-Cell Micro-Organisms, Dead	329,195	753,805	365,493
040410	Whey And Modified Whey, Whether Or Not Concentrated Or Containing Added Sweeteners	2,582,335	1,266,708	358,273
291570	Palmitic Acid, Stearic Acid, Their Salts And Esters	234,198	898,913	298,573
350400	Peptones And Derivatives; Other Proteins And Derivatives, Nesoi; Hide Powder, Chromed Or Not	519,347	334,451	295,001
330130	Resinoids	7,770	12,792	264,640
130239	Mucilages And Thickeners, Whether Or Not Modified, Derived From Vegetable Products, Nesoi	94,912	315,975	242,747
210210	Yeasts, Active	363,833	329,733	210,309
170290	Sugar, Nesoi, Including Invert Sugar And Invert Syrup	547,097	205,815	161,923
350190	Caseinates And Other Casein Derivatives; Casein Glues	36	148,738	127,850
130231	Agar-Agar	3,027	11,845	123,094

210111	Coffee Extracts, Essences And Concentrates, And Preparations With A Basis Of These Products Or With A Basis Of Coffee	83,178	32,392	110,550
190190	Malt Extract; Food Products Of Flour, Meal, Etc. With Cocoa (If Any) Under 40% And Milk Or Cream Products With Cocoa (If Any) Under 50%, Nesoi	183,587	123,639	95,225
190120	Mixes And Doughs For The Preparation Of Bread, Pastry, Cakes, Biscuits And Other Bakers' Wares Of Heading 1905	308,891	149,646	81,782
110630	Flour, Meal And Powder Of The Products Of Chapter 8	52,680	163,912	74,372
350110	Casein	0	63,831	64,642
130232	Mucilages And Thickeners, Whether Or Not Modified, Derived From Locust Beans, Locust Bean Seeds Or Guar Seeds	58,679	84,669	62,614
040490	Products Consisting Of Natural Milk Constituents, Whether Or Not Sweetened, Nesoi	67,537	31,423	61,284
180610	Cocoa Powder, Containing Added Sugar Or Other Sweetening Matter	2,195	15,803	60,456

Source: Trade Data Monitor (TDM)

**Table 3: South African Food Ingredient Imports from the World**

South Africa Imports from _World				
Commodity: Food Ingredients				
Annual & YTD Series				
HS Code	Description	2017	2018	2019
0	Total	1,702,284,474	1,769,637,876	1,700,339,232
330210	Mixtures Of Odoriferous Substances And Mixtures (Including Alcoholic Solutions) With A Basis Of These Substances Used In The Food Or Drink Industries	474,412,389	478,248,064	464,510,649
210690	Food Preparations Nesoi	167,814,369	185,672,636	180,872,792
230400	Soybean Oilcake And Other Solid Residues Resulting From The Extraction Of Soy Bean Oil, Whether Or Not Ground Or In The Form Of Pellets	184,419,886	163,436,532	132,624,466
230990	Animal Feed Preparations (Mixed Feeds, Etc.), Other Than Dog Or Cat Food Put Up For Retail Sale	86,199,703	112,781,576	95,190,559
210111	Coffee Extracts, Essences And Concentrates, And Preparations With A Basis Of These Products Or With A Basis Of Coffee	67,360,794	76,025,653	67,797,062
350790	Enzymes And Prepared Enzymes, Nesoi	73,443,981	69,139,533	61,126,387
180690	Cocoa Preparations, Not In Bulk Form, Nesoi	59,511,187	65,040,842	54,918,470
350510	Dextrins And Other Modified Starches	36,184,235	42,289,921	41,475,525
170490	Sugar Confectionary (Including White Chocolate), Not Containing Cocoa, Nesoi	36,766,857	39,332,554	39,518,531
170290	Sugar, Nesoi, Including Invert Sugar And Invert Syrup	39,021,985	31,545,234	35,440,700

040410	Whey And Modified Whey, Whether Or Not Concentrated Or Containing Added Sweeteners	15,894,194	21,811,043	34,391,598
350400	Peptones And Derivatives; Other Proteins And Derivatives, Nesoi; Hide Powder, Chromed Or Not	30,249,559	36,173,452	33,177,142
230110	Flours, Meals And Pellets, Of Meat Or Meat Offal, Unfit For Human Consumption; Greaves (Cracklings)	33,862,359	34,681,306	30,317,139
180631	Chocolate And Other Cocoa Preparations In Blocks, Slabs Or Bars, Weighing 2 Kg Or Less, Filled	19,601,985	23,790,726	28,326,101
210390	Sauces And Preparations Therefor, Nesoi; Mixed Condiments And Mixed Seasonings	20,342,234	21,022,847	25,864,918
230630	Sunflower Seed Oilcake And Other Solid Residues Resulting From The Extraction Of Sunflower Seed Oil, Whether Or Not Ground Or In The Form Of Pellets	7,115,053	8,605,077	25,648,384
291570	Palmitic Acid, Stearic Acid, Their Salts And Esters	22,369,272	26,238,680	20,296,358
180400	Cocoa Butter, Fat And Oil	21,219,671	24,503,557	18,911,298
210610	Protein Concentrates And Textured Protein Substances	13,500,390	14,270,397	15,619,048
170211	Lactose And Lactose Syrup Containing By Weight 99% Or More Lactose, Expressed As Anhydrous Lactose, Calculated On The Dry Matter	12,524,724	11,964,373	15,600,388
180310	Cocoa Paste, Not Defatted	15,936,031	16,489,715	15,131,605
350110	Casein	12,185,568	13,484,798	14,261,147
180500	Cocoa Powder, Not Containing Added Sugar Or Other Sweetening Matter	14,809,981	12,628,614	13,955,419
190190	Malt Extract; Food Products Of Flour, Meal, Etc. With Cocoa (If Any) Under 40% And Milk Or Cream Products With Cocoa (If Any) Under 50%, Nesoi	5,422,430	7,317,062	13,706,692

Source: TDM